

## **AIM**

To find the reproducibility of Natural head position in both frontal and profile view photograph, with and without cephalostat, using partially transparent mirror method at three different time intervals.

## **MATERIALS AND METHODOLOGY**

30 Subjects were divided each for cephalostat group and without cephalostat group. Frontal and profile photographs were taken for each subjects in both the groups .All the photograph were taken in natural head position at 3 intervals of time. All the photograph for frontal view was taken through the mirror with the camera placed at the backside of the mirror, And all the photograph for profile view was taken by ,the camera which was placed perpendicular to the subject and mirror was placed in front of the subject. Screen protractor (v1.1) is the computer software which was used to measure the angle between true vertical and inter-pupillary line for frontal view photographs and for profile view ,the angle between true vertical and RICKETS E-PLANE was measured using screen protractor v1.1 to asses the reproducibility of natural head position in the three intervals of time for each patient with and without cephalostat

## **RESULT**

One-Sample Kolmogorov -Smirnov Test was done to show that the test samples followed a normal or Gaussian distribution. Since the test distribution were normal ,paired samples 't' test was done to compare the reproducibility of natural head position with cephalostat and without cephalostat in both frontal and profile view in 3 interval of times (T0,T1,T2) since the p value was  $> (0.05)$  ,Intra group and inter group findings showed no statistical significant difference

among 3-intervals of time in both frontal view and profile photographs ,with cephalostat group and without cephalostat groups.

## **CONCLUSION**

Earlier studies have included only profile view and not included frontal view for eliciting reproducibility errors, innovatively, in this study, I have used partially reflective and transparent mirror, which benefits, both for patient to see and at the same time operator can take frontal view photograph through the mirror

In this study , Intra group and inter group showed, no statistical significant difference among 3-intervals of time in both frontal view and profile photographs ,with cephalostat group and without cephalostat groups

## **KEYWORD**

Natural Head Position, Reproducibility, Profile View, Frontal View, True vertical line.